

CLAIMS

1. A monitoring system comprises a plurality of terminals for monitoring whether predetermined monitoring points are in a stationary state or a nonstationary state, and one central processing device for controlling a setting/canceling operation of alarm operations of the terminals,
5 wherein the central processing device has a communication unit that receives information related to the stationary/nonstationary states from the terminals and transmits predetermined information including commands to the terminals, and
10 each terminal has a communication unit that transmits information related to stationary/nonstationary states to the central processing device and receives the predetermined information from the central processing device.
- 15 2. A monitoring system, wherein at least one of the plurality of terminals further has a controller that receives a command from the central processing device to autonomously start an alarm operation, and a alarm unit that generates a warning on occurrence of a nonstationary state.
- 20 3. A monitoring system, wherein at least one of the plurality of terminals further has an emergency call unit that transmits information indicating a nonstationary state by an operation of a user and a notification unit that performs notification by at least one of a visual method and an auditory method, and
25 when receiving the information indicating the nonstationary state from the emergency call unit of at least one terminal, the central processing device transmits a confirmation signal to the terminal, and, when receiving the confirmation signal from the central processing device, the terminal notifies through the notification unit that the transmission of the information can be
30 accepted.

4. The monitoring system according to claim 3, wherein at least one of the plurality of terminals has at least one of an opening/closing sensor for detecting an opening/closing state of an opening/closing article including a door or a window and a human body sensor for detecting the presence/absence of a human body, a warning unit, and a controller that receives a command from the central processing device to start an autonomous alarm operation, and generates a warning through the warning unit on occurrence of a nonstationary state.

5. The monitoring system according to claim 2 or 4, wherein the central processing device further has an operation unit that is used for setting or canceling an alarm operation, and transmits a command for setting the alarm operation to the terminal when a predetermined time elapses after an alarm setting is input by the operation unit.

6. The monitoring system according to claim 2 or 4, wherein at least one of the terminals has a storage unit that stores delay time information, the delay time information used for delaying generation of a warning by the warning unit by a predetermined period of time after a nonstationary state occurs.

7. The monitoring system according to claim 6, wherein the warning unit generates a normal warning after a preliminary warning is generated in occurrence of a nonstationary state.

8. The monitoring system according to claim 7, wherein the terminal has a storage unit operable to store at least one of a notification time, a sound volume, and a sound type related to at least one of the normal warning and the preliminary warning.

9. The monitoring system according to claim 8, wherein at least one of the notification time, the sound volume, and the sound type related to at least one of the normal warning and the preliminary warning and stored in the terminal is instructed by the central processing device.

5

10. The monitoring system according to claim 4, wherein, when receiving information of a nonstationary state from the terminal having the emergency call unit, the central processing device transmits a command for generating a warning to the other terminal having another warning unit to cause the warning unit of the other terminal to generate a warning.

10

11. The monitoring system according to claim 1, wherein at least one of the plurality of terminals further has remote operation unit that transmits information for setting or canceling an alarm operation according to an operation by a user and a notification unit that notifies that the transmission of the information can be accepted by at least one of a visual method and an auditory method in response to a confirmation signal from the central processing device, and

15

the central processing device transmits a command for setting or canceling an alarm operation to the terminals other than the at least one terminal when accepting the transmission of the information from at least one of the terminals.

20

12. The monitoring system according to claim 11, wherein at least one of the plurality of terminals has an opening/closing sensor for detecting an opening/closing state of an opening/closing article including a door or a window, and the central processing device further has a storage unit and a display unit, and

25

the central processing device stores the opening/closing state information transmitted from the terminal having the opening/closing sensor in

30

the storage unit,

when receiving information for setting an alarm operation from the terminal having the remote operation unit and if the opening/closing information stored in the storage unit represents an opening state, the central processing device displays that a door-lock check is abnormal on the display unit, and transmits a door-lock abnormal signal to the terminal having the remote operation unit, and

the terminal notifies through the notification unit that the door-lock check is abnormal when receiving the door-lock check abnormal signal.

10

13. The monitoring system according to claim 1, wherein, when receiving information related to a stationary or nonstationary state transmitted from the terminal, the central processing device returns a notification reset signal to the terminal, and the terminal completes the transmission of the information when receiving the notification reset signal.

15

14. The monitoring system according to claim 13, wherein, when the terminal can not receive the notification reset signal from the central processing device, the terminal repeats transmission of the information related to the stationary or nonstationary state a predetermined number of times.

20

15. The monitoring system according to claim 1, wherein, when receiving a command for setting or canceling an alarm operation from the central processing device, the terminal shifts to an alarm setting or alarm canceling state and transmits a shift confirmation signal to the central processing device, and the central processing device completes the transmission of the command in response to the shift confirmation signal.

25

16. The monitoring system according to claim 15, wherein the central processing device further has a storage unit, the central processing repeats, a

30

predetermined number of times, transmission of an alarm setting or alarm canceling command to a terminal from which the shift confirmation signal cannot be received, and when there is a terminal from which the shift confirmation signal cannot be received even though the transmission of the command is repeated a predetermined number of times, the central processing device stores that terminal as an abnormal device in the storage unit.

17. The monitoring system according to claim 1, wherein the central processing device further has a storage unit that stores information related to a stationary or nonstationary state including an operation history or an alarm history of a terminal.

18. The monitoring system according to claim 1, wherein the central processing device further has a display unit that displays information related to a stationary or nonstationary state.

19. The monitoring system according to claim 18, wherein at least one of the plurality of terminals has a battery for driving and a unit that detects the voltage of the battery and transmits a voltage drop signal to the central processing device when the detected voltage of the battery becomes not more than a predetermined voltage,

the central processing device displays on the display unit that the battery of the terminal runs out, when receiving the voltage drop signal from at least one of the terminals.

25

20. The monitoring system according to claim 18, wherein at least one of the plurality of terminals has an opening/closing sensor for detecting an opening/closing state of an opening/closing article including a door or a window, the central processing device has a storing unit and stores the opening/closing state information transmitted from the terminal having the

30

opening/closing sensor to the storage unit, and

when a setting of an alarm operation is input and if the opening/closing information stored in the storage unit represents an opening state, the central processing device displays, on the display unit, information representing that a door-lock check is abnormal.

21. The monitoring system according to claim according to claim 1, wherein the central processing device further has a public network connection unit that connects with at least one communication device registered in advance by an outside line when receiving information of a nonstationary state to notify the communication device of occurrence of the nonstationary state.

22. The monitoring system according to claim 21, wherein the central processing device further has a voice communication unit that transmits and receives an audio signal among a microphone, a loudspeaker, and a communication device, and

the central processing device becomes able to communicate with the communication device when a predetermined confirmation signal is returned from the communication device to the central processing device in response to the notification to the communication device.

23. The monitoring system according to any one of claim 22, wherein the central processing device is operable to set or cancel an alarm operation when receiving a predetermined setting signal from the communication device.

24. The monitoring system according to claim 21, wherein at least one of the terminals has a voice communication unit that transmits and receives an audio signal among a microphone, a loudspeaker, and a central processing device,

the central processing device has a voice communication unit that

transmits/receives an audio signal to/from the communication device, and

the central processing device enables communication between the communication device and the terminal through the central processing device, when a predetermined confirmation signal is returned from the communication device to the central processing device in response to the notification of the communication device.

25. The monitoring system according to claim 21, wherein, if the central processing device receives information of a nonstationary state from the terminal and transmits the information to the communication device and when a predetermined confirmation signal is returned from the communication device to the central processing device, the central processing device transmits a signal for instructing to stop a warning to a terminal which generates the warning.

26. The monitoring system according to claim 25, wherein, when receiving a predetermined signal for generating or stopping a warning, the central processing device transmits a command for generating or stopping a warning to the terminal.

27. The monitoring system according to claim 21, wherein, when a predetermined confirmation signal is not returned from one communication device notified within a predetermined period, the central processing device selects sequentially and circularly the other communication device registered in advance and notifies to the other communication device by the same procedure.

28. The monitoring system according to claim 27, wherein, when the central processing device cannot confirm the communication even though the central processing device circulates a predetermined number of times the communication devices registered in advance, the central processing device stores information representing that the communication cannot be confirmed to

the storage unit as a history and displays the information on the display unit.

29. The monitoring system according to claim 1, wherein the central processing device further has an internet connection unit that connects to a center server through an internet by bidirectional communication.

30. The monitoring system according to claim 29, wherein the central processing device transmits to the center server predetermined history information including a warning history.

31. The monitoring system according to claim 29, wherein a WEB on which an alarm setting state and a warning canceling state of the central processing device can be confirmed is structured in the center server.

32. The monitoring system according to claim 29, wherein a WEB on which alarm setting and alarm cancellation of the central processing device can be performed is structured in the center server.

33. The monitoring system according to claim 32, wherein, when a door-lock check is abnormal in execution of an alarm setting of the central processing device on a WEB, the center server displays failure of a setting on the WEB.

34. The monitoring system according to claim 1, wherein the central processing device has an external output terminal to which an external device can be connected.

35. The monitoring system according to claim 1, wherein the central processing device has a storage unit that stores a predetermined personal identification number required when an alarm operation is set or canceled.